



CA-NV AWWA Water Loss Technical Assistance Program

Wave 4 Water Audit Level 1 Validation Document

Audit Information:

Utility: Alco Water Service

PWS ID: 2710001

System Type: Potable

Audit Period: Calendar 2016

Utility Representation: Mohsen Kahia, Tom Adcock, Adnen Chaabane

Validation Date: 5/2/2017

Call Time: 9:00am

Sufficient Supporting Documents Provided: Yes

Validation Findings & Confirmation Statement:

Key Audit Metrics:

Data Validity Score: 74 Data Validity Band (Level): Band IV (71-90)

ILI: 1.02 Real Loss: 13.75 (gal/conn/day)

Apparent Loss: 1.91 (gal/conn/day)

Non-revenue water as percent of cost of operating system: 0.5

Certification Statement by Validator:

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit.

Validator Information:

Water Audit Validator: Will Jernigan / Jeff Cappadona (support) Validator Qualifications: Contractor for CA-NV AWWA Water Loss TAP









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Water System Name: Alco Water Service Water System ID Number:

2710001

Water Audit Period: Calendar 2016

Water Audit & Water Loss Improvement Steps:

Steps taken in preceding year to increase data validity, reduce real loss and apparent loss as informed by the annual validated water audit:

AWWA Water Audit Input #10:

Currently, a meter replacement program exists for the purpose of removing older volumetric meters and replacing them with more accurate electromagnetic meters which will be able to be incorporated into an Automate Meter Reading (AMR) system in the future. The utility's current meter accuracy testing practices are largely responsive to customer inquiries regarding high usages at their premises. The utility proposes to implement a meter accuracy testing program based on customer category, historical monthly usage (higher volume meters) consisting of approximately 0.5% of meter inventory (approximately 50 meters per year to be tested).

AWWA Water Audit Input #11:

To take measures against unauthorized consumption, the utility has identified susceptible areas (remote and isolated locations) and has the ability to install additional video surveillance security cameras online in its video surveillance security system. Otherwise, the utility will continue to monitor for unauthorized use through observation be crew, personnel, and third-party reports of suspicion of fraudulent use.

AWWA Water Audit Input #12:

Unbilled unmetered authorized consumption quantities can be further refined by utilizing portable magnetic meters to register authorized flows from hydrants when used by the utility for flushing purposes (itemized further for water quality monitoring, routine dead-end flushing, etc.) and for flow testing performed for individuals and agencies upon request.

Certification Statement by Utility Executive:

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, Water Audits and Loss Control Programs, Manual M36, Fourth Edition and in the Free Water Audit Software version 5.

Thomas R. Adcock	President	too he
Executive Name (Print)	Executive Position	Signature





9/20/17 Date